Required Configuration: TPMC-3X Series

Introduction

The Crestron® TPMC-3X Series touch screens are high performance AV devices that use a WiFi high bandwidth connection for instant-on performance and streaming AV content.

NOTE: For the TPMC-3X Series to achieve reliable, instant-on performance and extended battery life, the configuration procedure must be followed as listed below. Any deviation causes poor reliability and performance.

Overview

This document shows how to configure a TPMC-3X Series touch screen for proper operation. The configuration consists of:

- Static WEP-64 encryption

- Static IP address

- Unique IP address for each TPMC-3X Series touch screen

- Unique IP ID for each TPMC-3X Series touch screen

- Using only one wireless network entry in the *Preferred Networks* list of the TPMC-3X Series touch screen

- High performance mode settings

- Default time out settings

Configuration Steps

1. First, make sure the access point is configured using static WEP 64-bit encryption. If using a Crestron CEN-WAP (sold separately), it is configured correctly out of the box and no changes are required. Proceed to step 2.

   NOTE: If configuration changes have already been made to the CEN-WAP, follow the steps below to verify the settings. If using a different access point, configure it for 64-bit WEP encryption.

   a. Open Crestron Toolbox™ and click on the Device Discovery Tool (the binoculars icon).

   b. The Device Discovery Tool detects Crestron Access Points (CEN-WAP-xxx) and the access point should be visible in the device list. If not, the PC may not be on the same network as the access point or the access point is "hidden" or offline. Try to connect the two to the same network before proceeding.

   Click on it to open the CEN-WAP configuration Web pages. The default user name and password are both "admin". (Refer to the following illustration.)

View in Crestron Toolbox
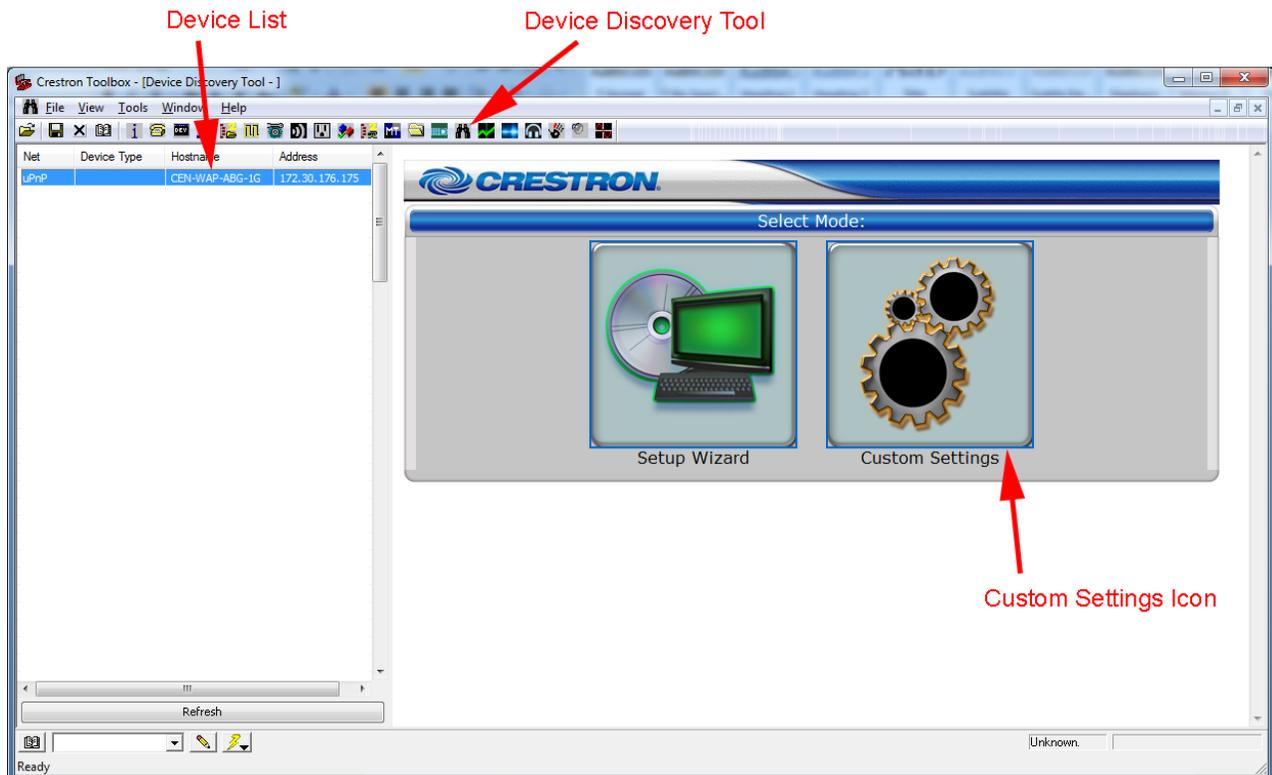
c. Click on the **Custom Settings** icon and then, on the subsequent Web page, click on the *Wireless* tab on the top bar. Then click on the *Security* tab below it. (Refer to the following illustration.)

View on Crestron Configuration Web Page
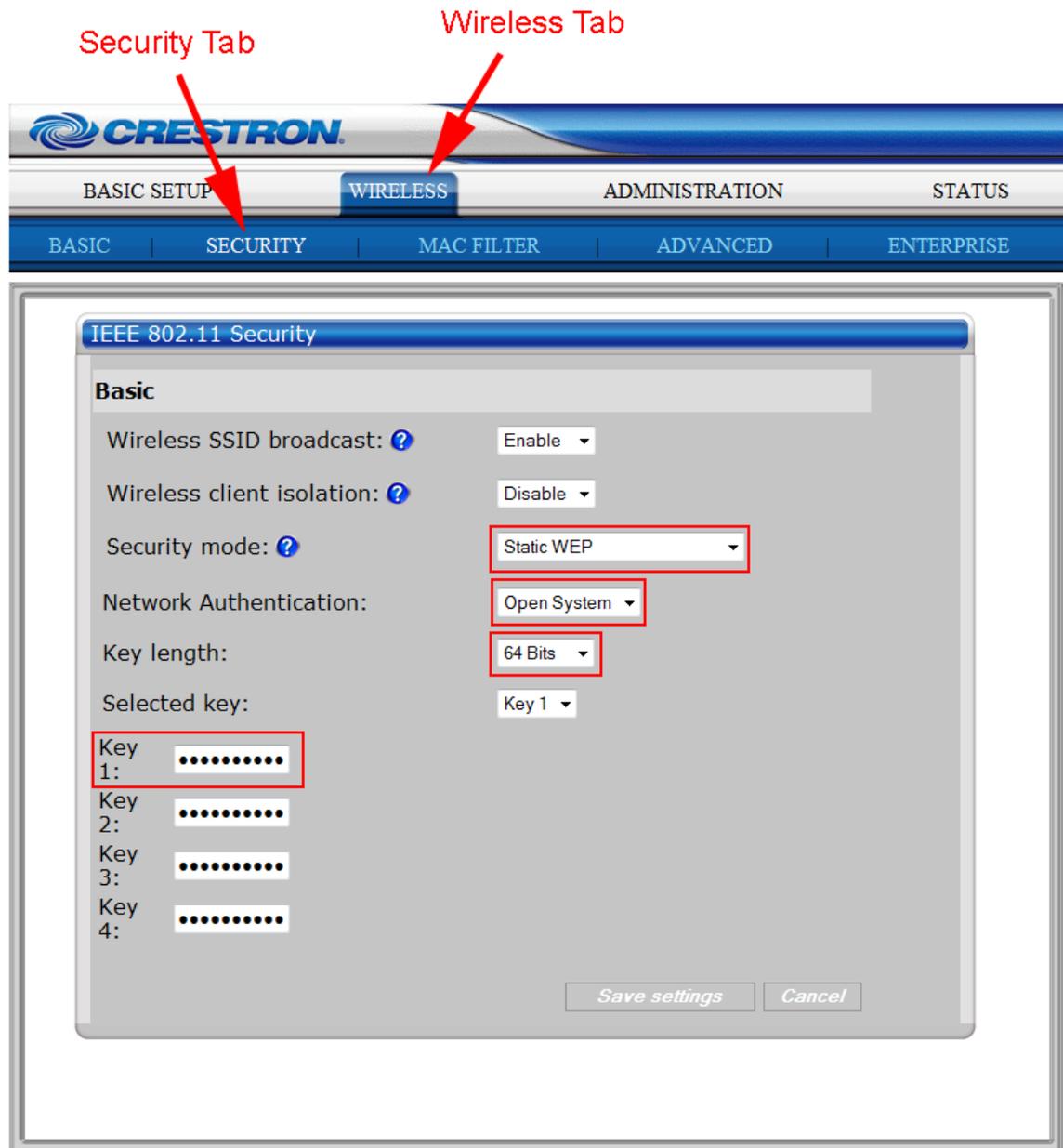
d. Make the following settings:

- *Security mode* to **Static WEP**

- *Network Authentication* to **Open System**

- *Key Length* to **64 Bits**

- Enter the 10 required characters (0-9, A-F) for the desired password in the *Key 1* field.

  For example, "1234567890". This entry is also made in the TPMC-3X Series device in step 9 of this document.

  Do not enter anything in the *Key 2*, *Key 3* or *Key 4* fields.

  Then click **Save settings**. The following steps are used for configuration of the TPMC-3X Series touch screen.

2. Enter *Setup* mode on the TPMC-3X Series touch screen by pressing the following buttons in order: **1**, **2**, **3**, **4**, **1**, **2**, **3**, **4**. The buttons are noted in the illustration below.

TPMC-3X Buttons 1 - 4
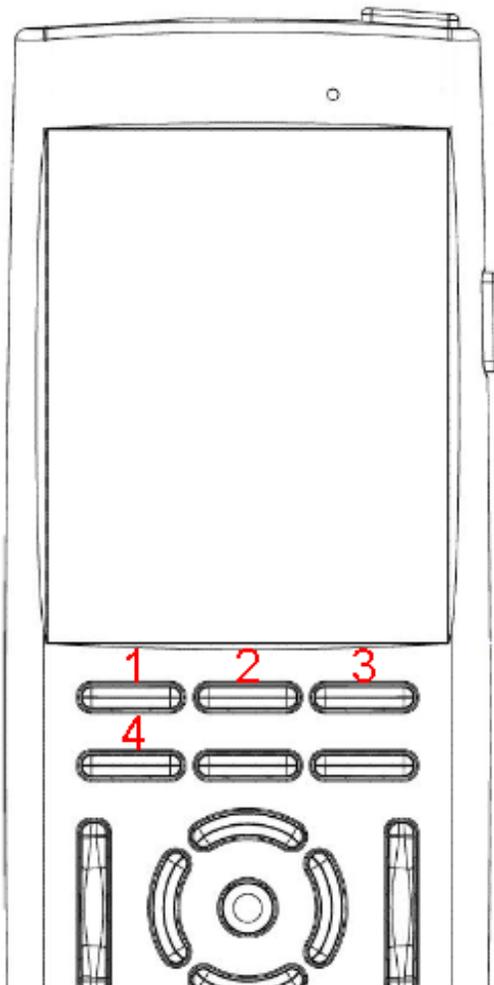
3. Select **WiFi Setup**, then **IP Config**, as shown in the following illustrations.

WiFi Setup and IP Config Selection
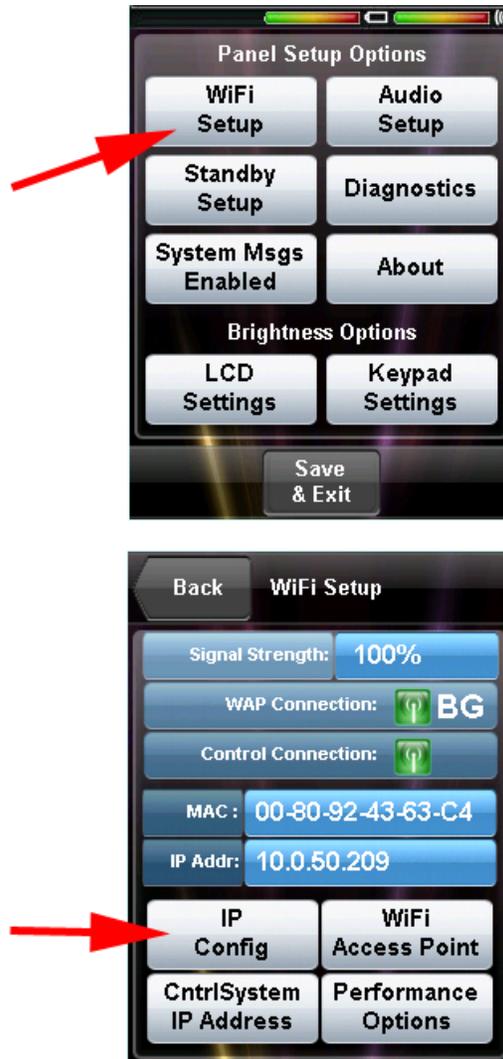
4. Set the TPMC-3X Series touch screen to use a static IP address using the following steps. (Refer to the illustrations that follow.)

   a. Select **USE STATIC**.

   b. Enter the appropriate values in the *IP Address*, *Subnet Mask* and *Gateway* fields.

   c. Select **DNS Servers**.

   d. Enter **8**.**8**.**8**.**8**. in the *Main DNS* field and **8**.**8**.**4**.**4**. in the *Alternate DNS* field to use Google's public DNS servers. Alternatively, use the DNS servers provided by the Internet Service Provider (ISP).

Static IP Settings
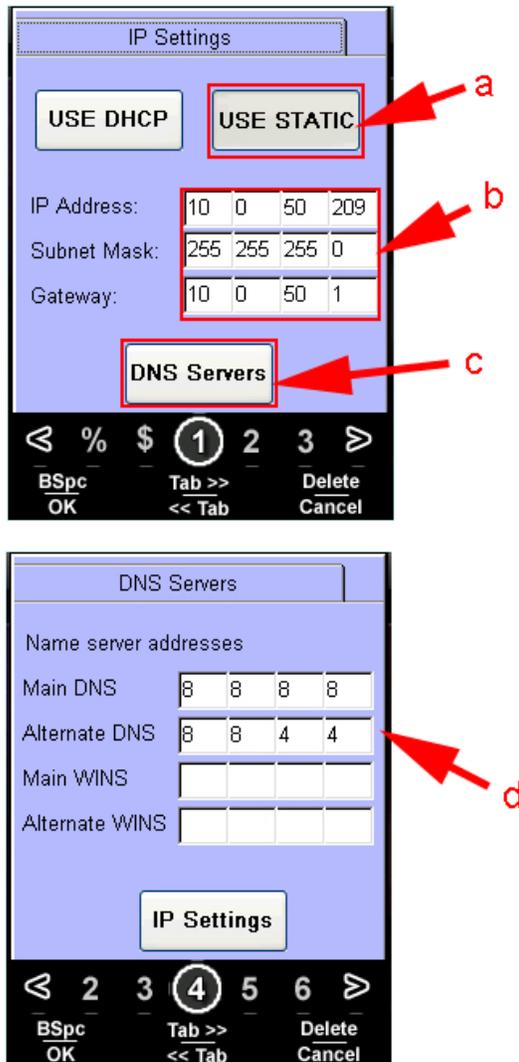
NOTE: If using multiple TPMC-3X Series touch screens in one installation, each TPMC-3X Series touch screen must have a unique IP address.

5. Return to the "WiFi Setup" screen and select **WiFi Access Point**. On the next screen, select **Advanced**. (Refer to the following illustrations.)

WiFi Access Point and Advanced Selection
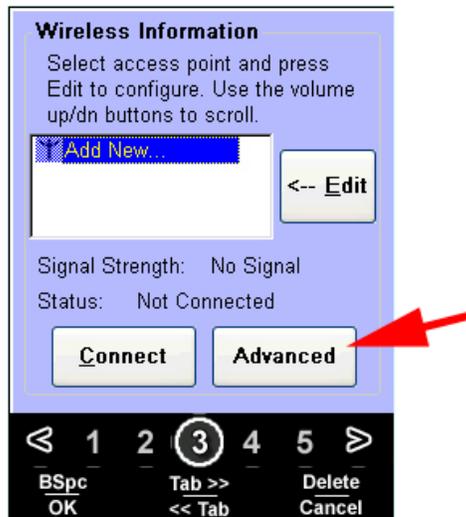
6. Select **Edit/Delete Preferred Access Points**. (Refer to the following illustration.)

Edit/Delete Preferred Access Points Selection
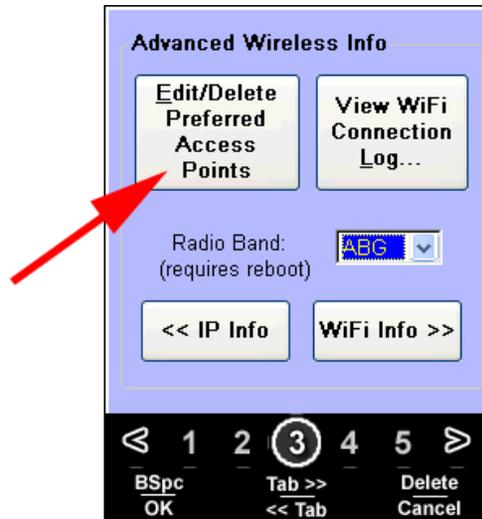
7. Delete all networks from the *Preferred Networks* list, other than the network name SSID of the access point desired for use with the TPMC-3X Series touch screen. (Refer to the illustration that follows.)

NOTE: If there is more than one network in this list, the TPMC-3X Series touch screen does not maintain a constant connection and does not work reliably.

NOTE: Make sure the *Radio Band* is set to **ABG** for all installations.

Preferred Networks List
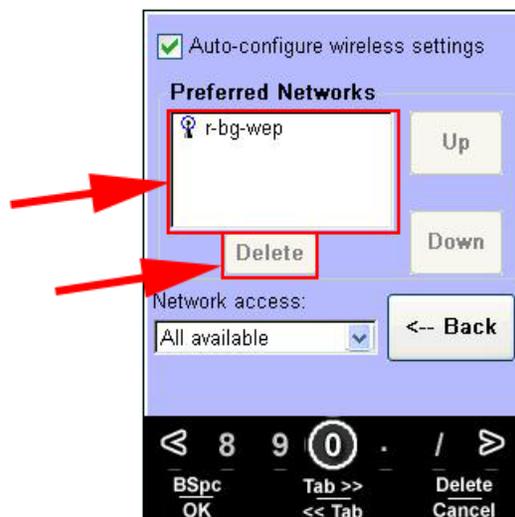
8. Click on the remaining network name in the preferred network list to configure the WiFi network.

9. Set the *Encryption* to **WEP** and the *Authentication* to **Open**. Enter the *Network key* for that access point. Then select **OK** to save the settings. (Refer to the illustration that follows.)

NOTE: On a Crestron CEN-WAP, the network key is located on the sticker affixed to the front of the access point. If the access point was configured in step 1, enter the 10 character password used in step 1d for the *Key 1* field. Then select **OK** to save the settings.

Encryption, Authentication and Network Key
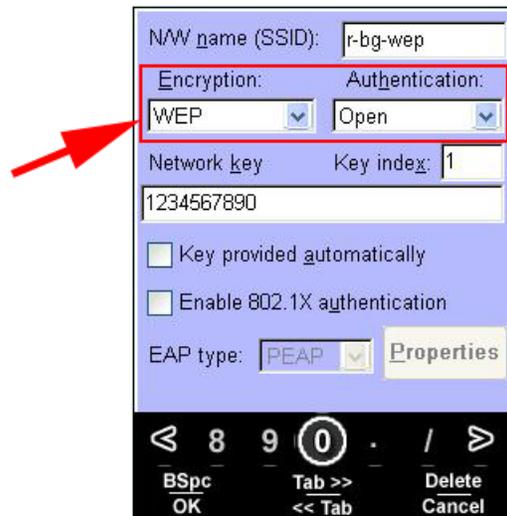
10. Return to the "WiFi Setup" screen and select **CntrlSystem IP Address**. (Refer to the following illustration.)

CntrlSystem IP Address Selection

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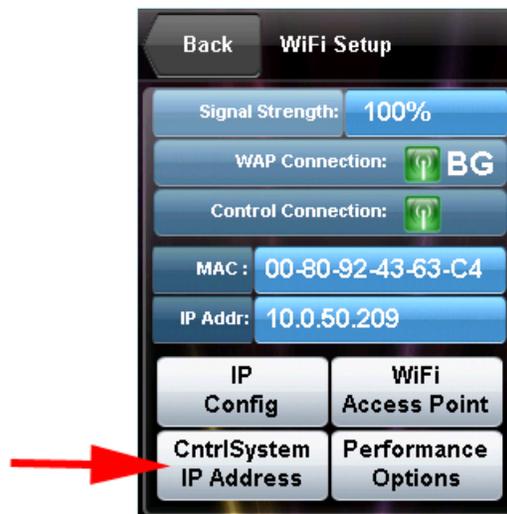
11. Enter the *IP Address* of the control system and the *IP ID* of the TPMC-3X Series touch screen as defined in the program. (Refer to the following illustration.)

IP Address and IP ID Entry
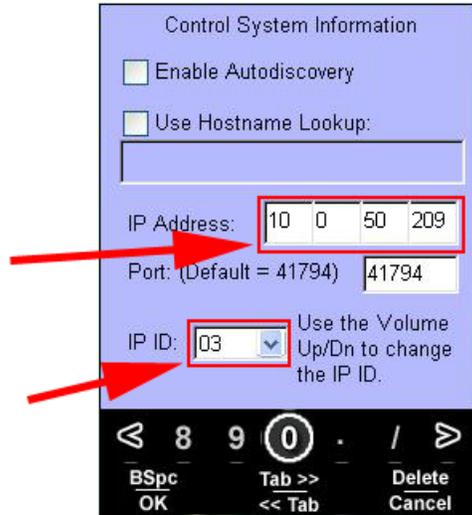
NOTE: If using multiple TPMC-3X Series touch screens in one installation, each TPMC-3X Series touch screen must have a different IP ID and different IP address.

12. Return to the "WiFi Setup" screen and select **Performance Options**. (Refer to the following illustration.)

Performance Options Selection

13. Select the **High Performance Mode** setting. (Refer to the following illustration.)

High Performance Mode Selection

14. Return to the main setup screen on the TPMC-3X Series touch screen and select **Standby Setup**. Set each of the timeouts to a value higher than 0 so the remote goes to sleep to conserve battery life. (Refer to the illustration that follows.)

Recommended settings are:

- *Docked Standby*: 60 seconds

- *Undocked Standby*: 30 seconds

"Standby Timeouts" Screen
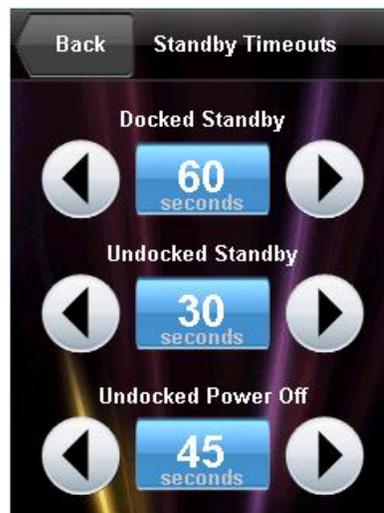
Additional Setup Notes

These notes and more can be found at the Crestron Web site (www.crestron.com/onlinehelp) Answer ID #5067.

NOTE: Roaming is only supported using Cisco controller solutions that are installed and commissioned by a Cisco certified technician. Otherwise, the TPMC-3X Series only supports a single access point in the room being controlled with a dedicated SSID. Optimally, the TPMC-3X Series device should be the only device connected to the access point.

NOTE: Using the same SSID name in more than one wireless router/access point in a system is considered "roaming" and results in poor performance unless using a Cisco solution.

NOTE: For best range, use 802.11g and ensure the RF channels are segregated properly, as channels 1, 6, and 11 are the only non-overlapping channels available. For more information, refer to the latest version of the Best Practices for Installation and Setup of Crestron RF Products Guide (Doc. 6689), which is available from the Crestron Web site (www.crestron.com/manuals).

NOTE: Only Crestron CEN-WAP and Cisco access points are fully supported by the TPMC-3X Series.

NOTE: In the "Diagnostics", "Tilt Test" screen, be sure to set *Tilt Wakes Panel* to **Off**.

NOTE: Please remember to buffer all data going to the TPMC-3X Series touch screen, to ensure only what is showing on the screen is being sent from the processor. (This can be done using join numbers on the pages to enable buffers.)

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